



CLAIM AMENDMENTS

Claim 1. (Currently Amended) A monopole low frequency test woofer, comprising:

5 a rigid mounting plate having an acoustical opening;

a monopole driver having a high mass cone and low resonance in free air, said driver being mounted on said mounting plate with a basket of said driver fitting about said acoustical opening;

10 a rear tub attached to said mounting plate forming an enclosure housing said monopole driver so that sound radiates from said enclosure only through said acoustical opening, a top portion of a rear panel of said rear tub being offset inward toward said mounting plate to have

15 lesser depth than a bottom portion of said rear tub to thereby form a slot; and

an electrical connector on said tub for connecting said monopole driver to an external circuit, said electrical connector being positioned in said slot flush with said  
20 lower portion of said rear panel.

Claim 2. (Previously Amended) A test woofer, as set forth in claim 1, including an inductor connected in series with said monopole driver, said inductor contouring  
25 frequency response of said monopole driver to match frequency response of a vehicle dipole speaker over a frequency range of interest.

Claim 3. (Original) A test woofer, as set forth in  
30 claim 1, wherein the frequency range of interest is from about 40 Hz to about 200 Hz.

Claims 4-8. (Cancelled)

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Claim 9. (Currently Amended) A band limited radiating source, comprising:

a rigid mounting plate having an acoustical opening;  
a monopole low frequency driver mounted on said  
5 mounting plate with a basket of said driver fitting about  
said acoustical opening;

an inductor connected in series with said monopole driver;

a tub sealed to said mounting plate forming an  
10 enclosure housing said monopole driver so that radiation  
propagates from said enclosure only through said acoustical  
opening, a top portion of a rear panel of said rear tub is  
offset inward toward said mounting plate to have lesser  
depth than a bottom portion of said rear tub to thereby  
15 forma slot; and

an electrical connector on said tub for connecting  
said monopole driver to an external circuit, said electrical  
connector being positioned in said slot flush with said  
lower portion of said rear panel.

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Claim 10. (Cancelled)

Claim 11. (Original) A band limited radiating  
source, as set forth in claim 9, wherein said monopole  
25 driver has a frequency response range of about 40 Hz to  
about 200 Hz.

Claims 12-16. (Cancelled)

Claims 17-20. (Cancelled)

21. (Previously Added) A method for determining loss in baffling due to speaker environment in a vehicle being non-ideal, comprising the steps of:

mounting a monopole driver having a basket, a high mass cone and low resonance in free air on a mounting plate, said mounting plate having an acoustical opening, said basket of said driver fitting about said acoustical opening;

sealing a tub to said mounting plate enclosing said driver so that sound radiates from said enclosure only through said acoustical opening;

attaching an electrical connector on said tub for connecting said monopole driver to an external circuit;

measuring output of said test woofer in the vehicle;  
and

comparing said test woofer output with output of an optimized vehicle dipole speaker and determining frequency response difference which is the loss in baffling due to speaker environment in the vehicle.